

REMARKS

Claims 2-15 are pending and stand rejected under 35 USC §102. Regarding Examiner's objection to claims 8, 13, Applicant believes examiner intended to object to claims 7, 13 as being duplicates of 6, 12 respectively. Claims 7, 13 are cancelled. Claims 17, 18, 19 are added directed to the edit commands described in Applicant's Specification.

Applicant's inventors provide a supportive editing environment to compose object oriented relationships, including unanticipated relationships between objects, not shown in the art. Claim 2 has been amended to better point out that the invention provides for universally reusable relationships and composite relationships that enable improved modeling and editing with reduced effort and cost as an improvement over the prior art.

Applicant disagrees with the Examiner's opinion that original Claims 2-15 are anticipated by Rumbaugh. Rumbaugh teaches modeling techniques used by programmers, but does not teach or anticipate a system or method for universally modeling data, nor does he teach or anticipate creating universal editing environments conforming to such meta model constraints. Rumbaugh discloses foundational principles of object orientation, for which "many well-known and widely available references" exist, as mentioned in the specification (see paragraph 0049 in published application 20020161777). However Rumbaugh discloses the now widely used practice of specifying abstract and concrete classes in the constructs of a programming language, requiring extensive skills and effort to create a) new models and model validation constraints, and b) editors for instantiating and relating object instances whose data and relations conform to said validation constraints. Moreover, the editors are not reusable

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across models. The invention disclosed in the Application “is comprised in such a way as to not require source code changes to support varied and unanticipated edit-time data models” as mentioned in the specification (see paragraph 0035 and elsewhere in published application 20020161777). This is a significant and novel improvement over the prior art in that it enables creation of new models and editors with much less skill, effort, and cost than is disclosed or suggested in the prior art.

Regarding Examiner’s opinion on Claim 2, figure 4.8 in Rumbaugh discloses object-oriented inheritance, which is distinct and different from the composite relationships disclosed in the specification (see description of KDRelationLink in detailed description, paragraph 0059 in published application #20020161777) and contemplated by the claims. Rumbaugh refers to this distinction (on page 77) by stating, “Aggregation must not be confused with generalization, even though both constructs form trees; aggregation is a tree of instances, generalization is a tree of classes.”

The constraints shown by Rumbaugh (in pages 73-76) are directed at constraining the values of attributes of objects, a method commonly referred to in the art as “field validation”. Field validation is relied upon by the invention but is not claimed in the application. The composite relationships and constraints disclosed in the specification and claimed by applicant are more akin to the “homomorphisms”, which by Rumbaugh refers to as “an esoteric concept” (in section 4.7.5). Rumbaugh states that “The homomorphism is really just an analogy – a special type of relationship between relationships.” He mentions that “Homomorphisms are most likely to occur for complex applications that deal with metadata” but he does not teach or anticipate a universal meta model for making new models and editors for such models. Moreover he concludes (on

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page 78) that "Modeling metadata can be confusing because the distinction between descriptor and referent is blurred" which further supports the novelty and non-obviousness of the claimed invention. Patentability of the claimed invention is supported by Rumbaugh's indication that such an invention has been needed, but was unanticipated and not reducible to practice by a skilled practitioner.

It is therefore the Applicant's opinion that amended Claim 2 does not read on Rumbaugh. Rumbaugh teaches modeling techniques, but does not teach or anticipate a universal meta model as disclosed in the specification and Claimed by Applicant.

Regarding Examiner's opinions on Claims 3-15, as these claims are dependent on Claim 2, it is the Applicant's opinion that Claims 3-15 do not read on Rumbaugh and Rumbaugh does not teach or anticipate the claimed invention.

In view of the foregoing, the application is considered in good and proper form for allowance, and the Examiner is respectfully requested to pass this application to issue. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,

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